



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,119	06/25/2001	Masanobu Saito	35.C15478	7331

5514 7590 12/11/2003

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

2863

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,119

Applicant(s)

SAITO ET AL.

Examiner

Michael P Nghiem

Art Unit

2863



-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-7,11-15 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,5-7,11-14 and 25-29 is/are allowed.
- 6) ☒ Claim(s) 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 15 and 19-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

The Preliminary Amendment filed on November 12, 2003 has been acknowledged.

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 12, 2003 has been entered.

Claim Objections

2. Claims 15 and 24 are objected to because of the following informalities:
- claim 15, "pulse-width control means for controlling said modulating means such that a pulse width for an image pixel, ... is exposed **in a common main scanning, is longer than a pulse width for the other image pixel**" is incorrect. Fig. 9 shows the image pixels of Beam A and Beam B exposed in a common main scanning. However, the pulse width of image pixel A is equal to the pulse width of image pixel B.
 - claim 24, line 11, after "detected", "by" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23, "a pulse width for a pixel which is not detected" is not understood. Fig. 8 shows image pixel A and image pixel B exposed in different main scanings and that the pulse width of image pixel A is shorter than the pulse width of image pixel B. However, it is not clear that Fig. 8 shows "a pulse width for a pixel detected in said detecting step is shorter than a pulse width for a pixel which is not detected in said detecting step."

Likewise, in claim 24, "a pulse width for a pixel which is not detected" is not understood. Fig. 9 shows image pixel A and image pixel B exposed in a common main scanning and that the pulse width of image pixel A is equal to the pulse width of image pixel B. It is not clear that Fig. 9 shows "a pulse width for a pixel detected in said detecting step is longer than a pulse width for a pixel which is not detected in said detecting step."

Allowable Subject Matter

4. Claims 2, 3, 5-7, 11-14, and 25-29 are allowed.
5. Claims 15 and 19-22 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.
6. Claims 23 and 24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Reason for Allowance

7. The combination or method as claimed wherein an image forming apparatus comprising a latent image forming means which does not pulse-width-modulate the drive signal in the case that at least two of the plurality of semiconductor lasers are simultaneously turned on in one scanning, and pulse-width-modulates the drive signal in the case that one of the plurality of semiconductor lasers is turned on in one scanning (claims 2, 3, 5, 6) or controlling the modulation such that a pulse width for an image pixel, to which another image pixel adjacent in a sub-scanning direction exists and is exposed in a different main scanning, is shorter than a pulse width for the other image (claims 7) or controlling the modulation such that a pulse width for an image pixel, to which another image pixel adjacent in a

sub-scanning direction exists and is exposed in a common main scanning, is longer than a pulse width for the other image (claim 15) or in different main scanings, controlling the modulation such that a pulse width for a pixel detected in said detecting step is shorter than a pulse width for a pixel which is not detected (claim 23) or in common main scanings, controlling the modulation such that a pulse width for a pixel detected in said detecting step is longer than a pulse width for a pixel which is not detected (claim 24) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for

Art Unit: 2863

the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0956.



MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

December 9, 2003